Overview of Office of Nuclear Materials Disposition

Briefing to the Site Specific Advisory Board

Gary DeLeon
Director, Office of Nuclear Materials Disposition

September 16, 2008





• Mission - develop strategies for the disposition of EM's excess/surplus nuclear materials and spent nuclear fuel

Key Activities

- Surplus Highly Enriched Uranium (HEU):
 - Enriched Uranium Disposition Project established in August 2006
 - Utilize H-Canyon at the Savannah River Site (SRS) to disposition about 21 metric tons of surplus HEU located across the DOE complex (includes 13.5 metric tons of HEU in the form of aluminum-clad spent nuclear fuel)
 - HEU down-blended to low enriched uranium for use into commercial fuel

Excess Uranium:

- Secretarial Policy on Management of DOE's Excess Uranium Inventory issued in March 2008
- Request For Proposal for potential sale/reuse of initial lots of excess uranium located at the Portsmouth Gaseous Diffusion Plant issued in August 2008
- Continue with planning for disposition of other excess uranium materials located at Portsmouth and Paducah sites



Key Activities, continued

Surplus Plutonium-239:

- Decision to consolidate surplus non-pit plutonium from Hanford, Lawrence Livermore National Laboratory, and Los Alamos National Laboratory to SRS issued September 2007
- Consolidation ongoing; Hanford on track to complete by September 2009
- "Two-pronged" disposition strategy identified as preferred alternative June 2008; subject to completion of NEPA

Other Nuclear Materials:

- Implementation Plan for Disposition of Surplus U-233 approved October 2007
- Implementation Plan for Pu-238 Disposition and Consolidation under preparation

cleanup



Key Activities, continued

- Spent Nuclear Fuel (SNF)
 - Prepare EM Strategic Plan for Management and Disposition of SNF
 - Process aluminum clad SNF in H-Canyon as part of Enriched Uranium Disposition Project
 - Package non-aluminum clad SNF at INL and Hanford for disposal in Yucca Mountain
 - Continue planning efforts to consolidate aluminum clad SNF at SRS
 - Assist ongoing NRC review of License Application for Yucca Mountain
 - Continue ongoing activities in receipt of foreign and domestic research reactor fuel